AMENDMENT TO THE CLAIMS

Please amend the claims as follows:

1. (Previously presented) An array substrate comprising:

a substrate;

a switching device formed in a pixel area defined by a gate line and a source line, the gate line extended in a first direction and arranged in a second direction substantially perpendicular to the first direction, the source line extended in the second direction and arranged in the first direction, the switching device having a gate electrode extended from the gate line, a source electrode extended from the source line and a drain electrode spaced apart from the source electrode;

a pixel electrode connected to the drain electrode; and

a reflecting plate formed on the pixel electrode so as to define a reflecting area from which a natural light is reflected and a transmitting area through which an artificial light is transmitted, wherein the pixel electrode has a first height at the reflecting area and a second height at the transmitting area, wherein the first height is greater than the second height with respect to the substrate, and wherein the reflecting plate has a first edge extended to the transmitting area.

2. (Original) The array substrate of claim 1, further comprising:

an organic insulating layer formed in the reflecting area with a contact hole through which the drain electrode is partially exposed ; and

an inter-insulating layer formed on the pixel electrode connected to the drain electrode through the contact hole,

wherein the reflecting plate is formed on the inter-insulating layer.

3. (Original) The array substrate of claim 2, wherein a second edge of the reflecting area adjacent to the transmitting area is removed by a predetermined width toward the extended direction of the first edge so as to widen the transmitting area.

4. (Original) The array substrate of claim 1, further comprising:

an insulating layer formed on the switching device and the substrate with a contact hole through which the drain electrode is exposed;

an organic insulating layer formed on the reflecting area; and

an inter-insulating layer formed on the organic insulating layer,

wherein the pixel electrode is formed on the insulating layer, and connected to the drain electrode through the contact hole,

wherein the reflecting area is formed on the inter-insulating layer, and the first edge extended to the transmitting area is connected to the pixel electrode exposed through the transmitting area.

5. (Original) The array substrate of claim 4, wherein a second edge of the reflecting area adjacent to the transmitting area is removed by a predetermined width tow ard the extended direction of the first edge so as to widen the transmitting area.

6. (Original) The array substrate of claim 1, wherein a width of the pixel electrode in the first direction is substantially equal to or smaller than a width of the pixel area in the first direction.

7. (Original) The array substrate of claim 1, wherein widths of the pixel electrode in the first and second directions are substantially equal to or smaller than widths of the pixel area in the first and second directions, respectively.

8. (Currently amended) A liquid crystal display apparatus comprising:

an upper substrate having a color pixel, the color pixel having a first thickness at a position corresponding to a reflecting area and a second thickness at a position corresponding to a transmitting area, which is thicker than the first thickness;

a lower substrate having a switching device, a pixel electrode connected to a drain electrode of the switching device, and a reflecting plate formed on the pixel electrode with a transmission window so as to define the reflecting area from which a natural light is reflected and the transmitting area through which an artificial light is

transmitted, wherein the pixel electrode has a first height at the reflecting area and a second height at the transmitting area, wherein the first height is greater than the second height with respect to the lower substrate, and wherein the reflecting plate has an edge partially extended to the transmitting area; and

a liquid crystal layer interposed between the upper and lower substrates.

9. (Currently amended) The liquid crystal display apparatus of claim 8, wherein the liquid crystal layer comprises a ~~third~~ first thickness at the position corresponding to the reflecting area and a ~~fourth~~ second thickness at the position corresponding to the transmitting area, wherein the ~~fourth~~ second thickness is thicker than the ~~third~~ first thickness.

10. (Original) The liquid crystal display apparatus of claim 8, wherein the transmission window is defined by at least three sides of the reflecting plate, and at least one side of the three sides of the reflecting plate is extended to be connected with the pixel electrode.

11. (Original) The liquid crystal display apparatus of claim 8, wherein the transmission window is defined by at least three sides of the reflecting plate, and a portion of a first side of the three sides and a portion of a second side adjacent to the first side of the three sides are extended to be connected with the pixel electrode.

12. (Original) The liquid crystal display apparatus of claim 11, wherein the l ower substrate further comprises a rubbed alignment layer formed on the reflecting plate so as to align the liquid crystal layer, and a connection shape between the reflecting plate and the pixel electrode depends upon a rubbing direction of the rubbed alignment layer.

13. (Original) The liquid crystal display apparatus of claim 12, wherein, whe n the pixel electrode is viewed at an upper position thereof, an area where the reflecting p late electrically connected to the pixel electrode comprises an L-shape when the rubbing direction is in a range from about 10 to about 11 o'clock, a reversed L-shape shape when

the rubbing direction is in a range from about 1 to about 2 o'clock, and a substantially an d horizontally straight line shape when the rubbing direction is about 12 o'clock.

14. (Original) The liquid crystal display apparatus of claim 8, wherein the lo wer and upper substrates further comprise a first alignment layer rubbed in a first directio n and a second alignment layer rubbed in a second direction opposite to the first direction , respectively, so as to align the liquid crystal layer, so that the liquid crystal layer is align ed in a homogeneous alignment state by the first and second alignment layers.

15. (Original) The liquid crystal display apparatus of claim 8, wherein the s witching device is formed in a pixel area defined by a gate line extended in a first directio n and arranged in a second direction substantially perpendicular to the first direction and a source line extended in the second direction and arranged in the first direction,

wherein the switching device comprises a gate electrode extended from the gate line, a source electrode extended from the source line and a drain electrode spaced apart from the source electrode in a predetermined distance,

wherein a width of the pixel electrode in the first direction is substantially equal to or smaller than a width of the pixel area in the first direction, and

wherein the pixel electrode is electrically connected to the drain electrode so as to receive a voltage signal provided through the drain electrode.

16. (Original) The liquid crystal display apparatus of claim 8, wherein the switching device is formed in a pixel area defined by a gate line extended in a first direction and arranged in a second direction substantially perpendicular to the first direction and a source line extended in the second direction and arranged in the first direction,

wherein the switching device comprises a gate electrode extended from the gate line, a source electrode extended from the source line and a drain electrode spaced apart from the source electrode in a predetermined distance,

wherein a width of the pixel electrode in the first direction and a width of the pixel electrode in the second direction are substantially equal to or smaller than a width

of the pixel area in the first direction and a width of the pixel area in the second direction, respectively, and

wherein the pixel electrode is electrically connected to the drain electrode so as to receive a voltage signal provided through the drain electrode.

17. (Currently amended) In a liquid crystal display apparatus that displays an image using an artificial light or a natural light passing through a liquid crystal layer, the liquid crystal display apparatus comprising:

a first substrate;

a switching device formed in a pixel area that is defined by a gate line and a source line disposed on the first substrate, the gate line extended in a first direction and arranged in a second direction substantially perpendicular to the first direction, the source line extended in the second direction and arranged in the first direction;

a pixel electrode connected to a drain electrode of the switching device; and

a reflecting plate disposed on the pixel electrode so as to define a reflecting area from which the natural light is reflected and a transmitting area through which the artificial light is transmitted, wherein the pixel electrode has a first height at the reflecting area and a second height at the transmitting area, wherein the first height is greater than the second height with respect to the first substrate, and wherein the reflecting plate has a first edge extended to the transmitting area.

18. (Original) The liquid crystal display apparatus of claim 17, further comprising:

an insulating layer formed on the switching device and the first substrate with a first contact hole through which the drain electrode is partially exposed;

an organic insulating layer formed on the reflecting area with a second contact hole corresponding to the first contact hole so as to expose the drain electrode; and

an inter-insulating layer formed on the pixel electrode connected to the drain electrode through the second and first contact holes,

wherein the reflecting plate is formed on the inter-insulating layer.

19. (Currently amended) The liquid crystal display apparatus of claim 17, further comprising:

a second substrate; and

a color pixel disposed on the second substrate, the color pixel having a first thickness at a position corresponding to the reflecting area and a second thickness at a position corresponding to the transmitting area, which is thicker than the first thickness,

wherein the liquid crystal layer is disposed between the first and second substrates, and has a ~~third~~ first thickness at the position corresponding to the reflecting area and a ~~fourth~~ second thickness at the position corresponding to the transmitting area, which is thicker than the ~~third~~ first thickness.

20. (Original) The liquid crystal display apparatus of claim 19, further comprising:

a first alignment layer formed on the reflecting plate and rubbed in a first direction so as to align the liquid crystal layer; and

a second alignment layer formed on the color pixel and rubbed in a second direction opposite to the first direction so as to align the liquid crystal layer,

wherein the liquid crystal layer is aligned in a homogeneous alignment state by the first and second alignment layers.

21. (Currently amended) In a liquid crystal display apparatus that displays an image using an artificial light or a natural light passing through a liquid crystal layer, the liquid crystal display apparatus comprising:

a first substrate;

a switching device formed in a pixel area that is defined by a gate line and a source line disposed on the first substrate, the gate line extended in a first direction and arranged in a second direction substantially perpendicular to the first direction, the source line extended in the second direction and arranged in the first direction, and the switching device having a gate electrode extended from the gate line, a source electrode extended from the source line and a drain electrode spaced apart from the source electrode;

an insulating layer formed on the switching device and the first substrate with a contact hole through which the drain electrode is partially exposed;

a pixel electrode partially formed on the insulating layer, and connected to the drain electrode through the contact hole;

an organic insulating layer formed on the insulating layer and the pixel electrode in the reflecting area to expose the ~~insulating layer~~ pixel electrode corresponding to the transmitting area;

an inter-insulating layer formed on the organic layer corresponding to the reflecting area; and

a reflecting plate disposed on the inter-insulating layer so as to define the reflecting area and the transmitting area, the reflecting ~~area~~ plate having a first edge extended to the transmitting area to connect the reflecting plate to the pixel electrode.

22. (Original) The liquid crystal display apparatus of claim 21, further comprising:

a second substrate; and

a color pixel disposed on the second substrate, the color pixel having a first thickness at a position corresponding to the reflecting area and a second thickness at a position corresponding to the transmitting area, which is thicker than the first thickness,

wherein the liquid crystal layer is disposed between the first and second substrates, and has a third thickness at the position corresponding to the reflecting area and a fourth thickness at the position corresponding to the transmitting area, which is thicker than the third thickness.

23. (Original) The liquid crystal display apparatus of claim 21, further comprising:

a first alignment layer formed on the reflecting plate and rubbed in a first direction; and

a second alignment layer formed on the color pixel and rubbed in a second direction opposite to the first direction,

wherein the liquid crystal layer is aligned in a homogeneous alignment state by the first and second alignment layers.

24. (Original) The liquid crystal display apparatus of claim 21, wherein a width of the pixel electrode in the first direction is substantially equal to or smaller than a width of the pixel area in the first direction.

25. (Original) The liquid crystal display apparatus of claim 21, wherein widths of the pixel electrode in the first and second directions are substantially equal to or smaller than widths of the pixel area in the first and second directions, respectively.